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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/775,315	02/01/2001	Hyun-Sook Jung	41671/DBP/Y35	8247
23363	7590	10/15/2004	EXAMINER	
CHRISTIE, PARKER & HALE, LLP			MERCADO, JULIAN A	
PO BOX 7068			ART UNIT	
PASADENA, CA 91109-7068			PAPER NUMBER	
			1745	
DATE MAILED: 10/15/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/775,315

Applicant(s)

JUNG ET AL.

Examiner

Julian Mercado

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

This Office action is responsive to applicant's amendment filed August 26, 2004.

Claims 1-4 and 10 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 10 is rejected under 35 U.S.C. 103(a) as obvious over Mayer. (U.S. Pat. 5,783,333).

The rejection is maintained for the reasons of record and for the additional reasons not yet discussed in response to applicant's present amendment to the pending claims. Independent claim 10 has been amended to recite that the heat-treatment step is for the resulting mixture of lithium nickel cobalt oxides and lithium manganese oxides. Applicant also asserts that the claimed chemical bonding is for the lithium nickel cobalt oxides and lithium manganese oxides. In reply, the examiner asserts that Mayer teaches chemical bonding of the lithium nickel cobalt oxides and lithium manganese oxides insofar as a polymeric binder is heated to its melting point to bind the two materials. This step is not found different from applicant's disclosed chemical bonding of a similar binder. (specification on page 7)

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As to claim 10 not including the additional metal "M" as present in Mayer, this is not persuasive as the claims recite lithium nickel cobalt oxides, a plurality of lithium nickel cobalt oxide *forms*. [emphasis added] The claimed lithium nickel cobalt oxides has been interpreted in a manner consistent with applicant's disclosure of a

$\text{Li}_x\text{Ni}_{1-y-z}\text{Co}_y\text{M}_z\text{O}_2$ as disclosed in the specification on page 6 line 22 et seq, that is, as a compound that does not preclude the additional metal "M" as taught by Mayer. The scope of the present claims, especially when read in light of the specification, does not limit the claimed lithium nickel cobalt oxides as not including an additional metal.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pynenburg et al. (U.S. Pat. 5,429,890) in view of Hasegawa et al. (U.S. Pat. 5,370,948).

The rejection is maintained for the detailed reasons already of record. The examiner notes applicant's amendment further reciting that the ratio of lithium manganese oxides to lithium nickel manganese oxides provides "an excess of lithium nickel manganese oxides". However, as set forth in the previous Office action, as to the weight ratio of lithium manganese oxide to the lithium nickel manganese oxide being less than 1, absent of unexpected results it is asserted that these are optimizable parameters for result-effective variables. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) Pynenburg et al. teaches or at least suggests that the relative proportions of the mixed oxide components are result-effective as the total cell capacity is proportional to the area under the curve of the differential cell capacity dQ/dV vs. voltage of each of the cathode oxide active materials; note the difference in areas between Figure 1 and inventive

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Figure 2. Pynenburg et al. teaches a weight ratio of 1:10 to 10:1 (col. 7 line 55-60), thus, absent of unexpected results the skilled artisan without undue experimentation would focus on weight ratios within this range in order to maximize the result-effective total cell capacity.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

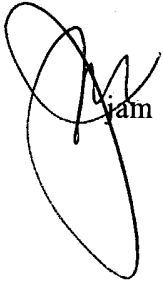

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Mercado whose telephone number is (571) 272-1289. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

A handwritten signature, possibly reading "Jam", enclosed within a large, loopy oval.A handwritten signature, possibly reading "Patrick Byer".
Patrick Byer
SBB-AU1745